

(No Model.)

J. S. THORN.

METALLIC HIP ROLL OR ANGLE BEAD.

No. 370,167.

Patented Sept. 20, 1887.

Fig. 1.

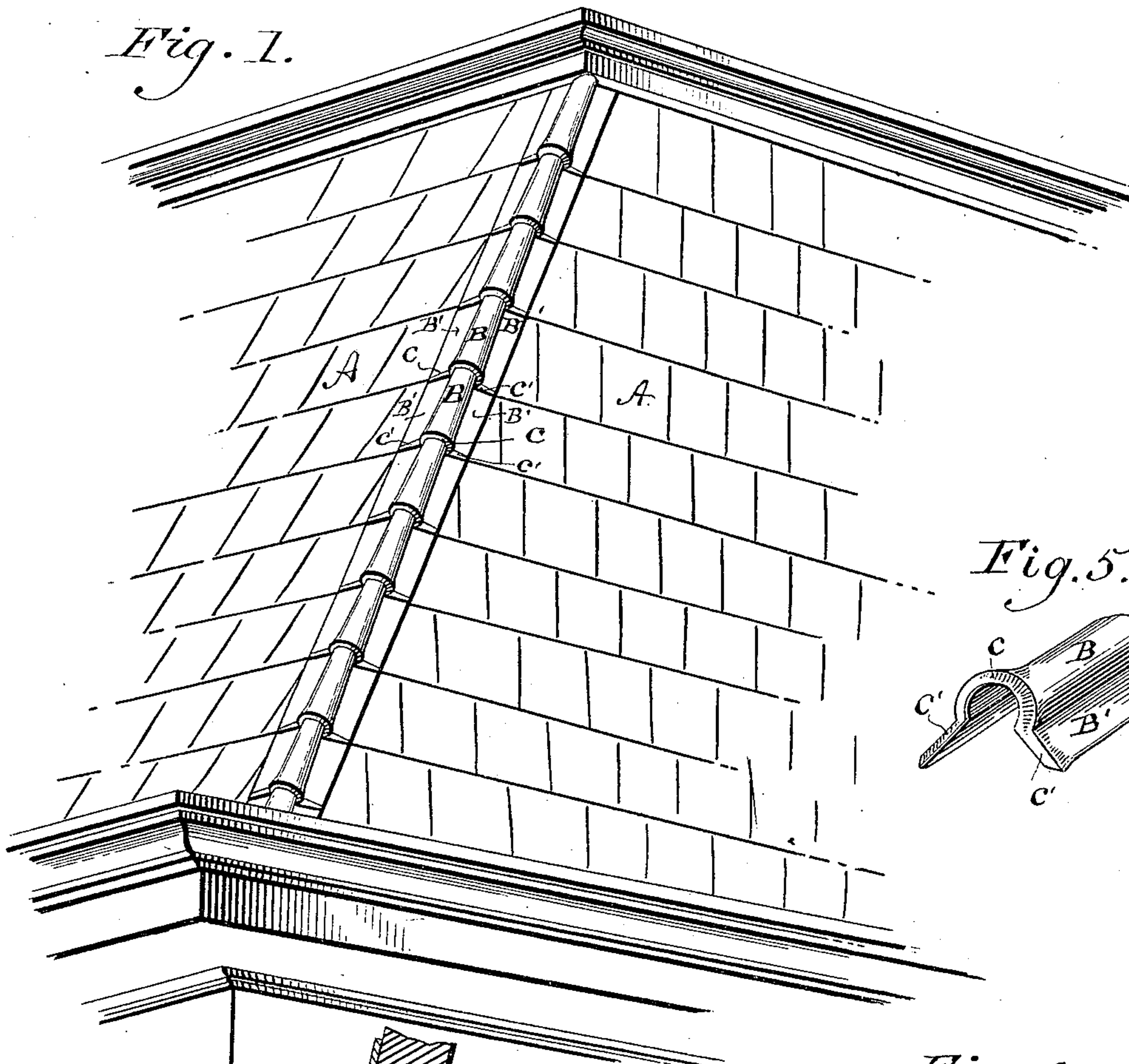


Fig. 5.

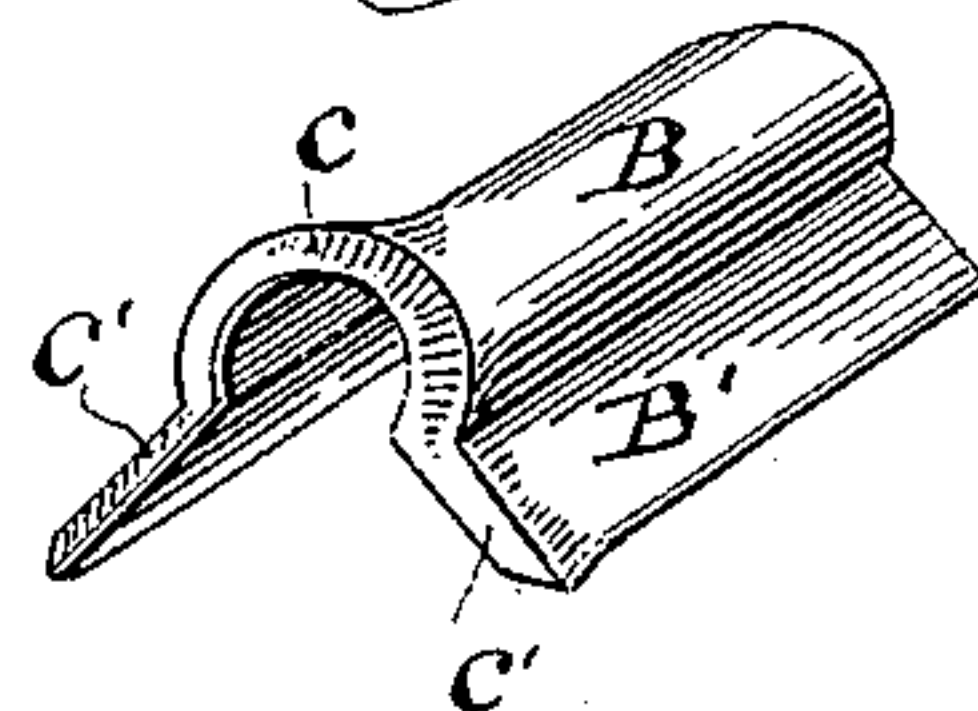


Fig. 4.

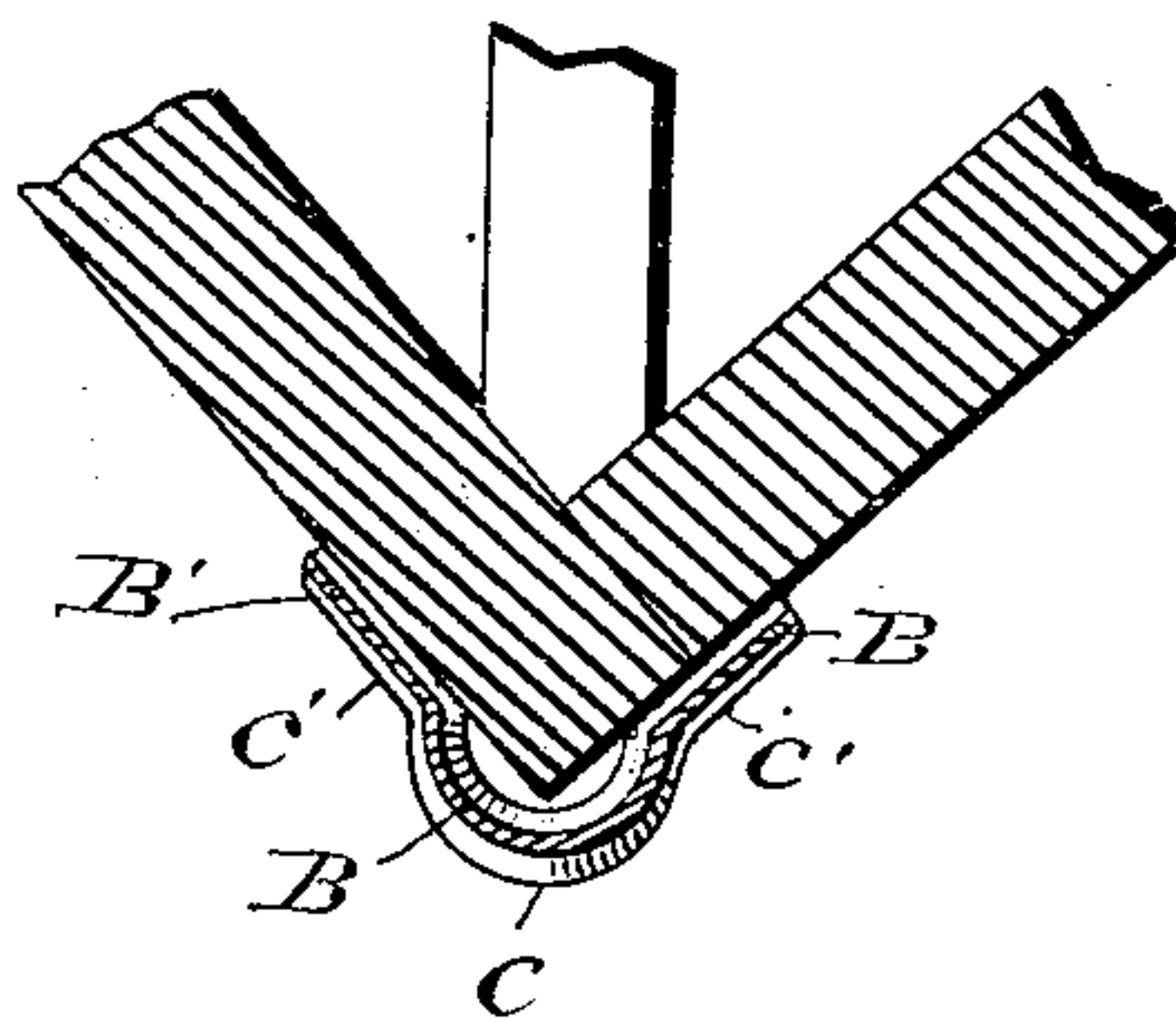


Fig. 3.

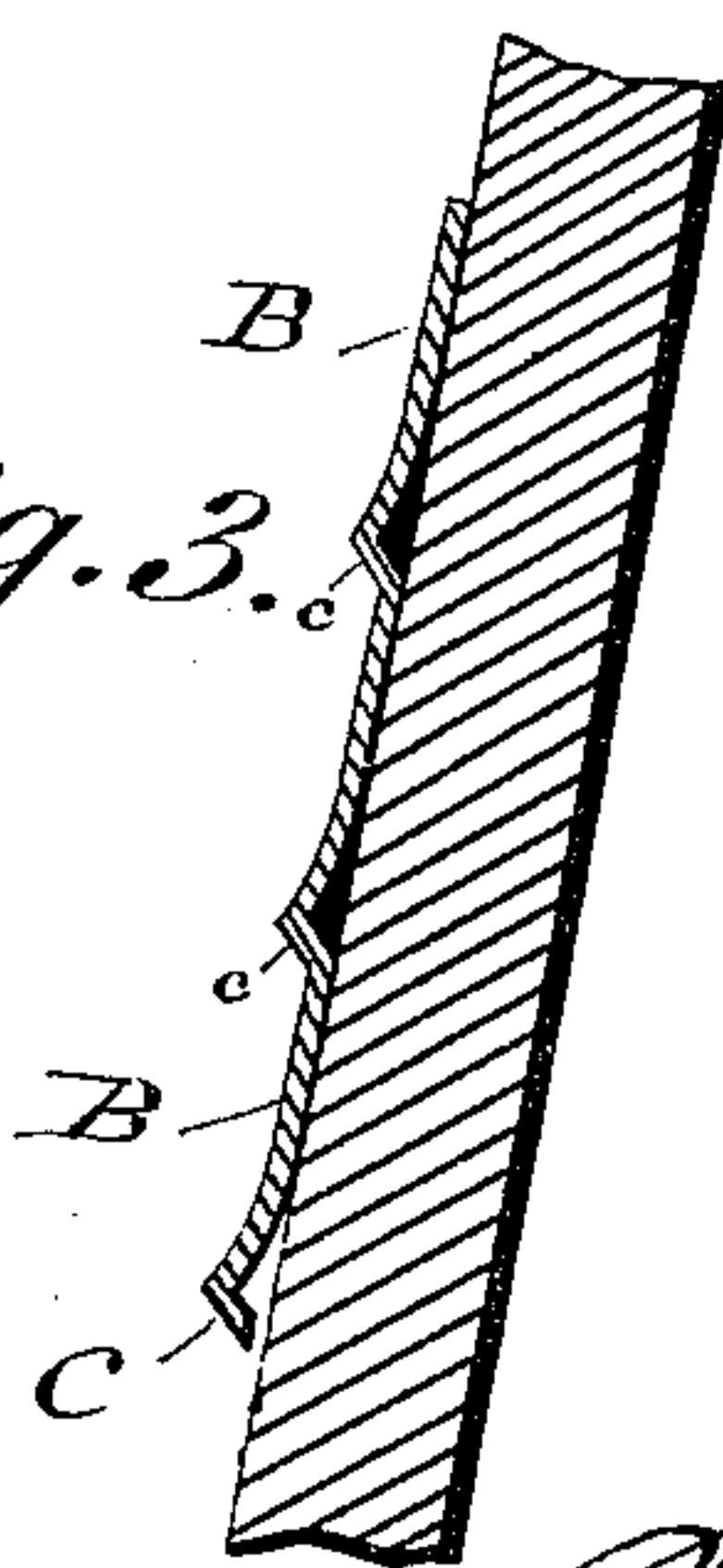
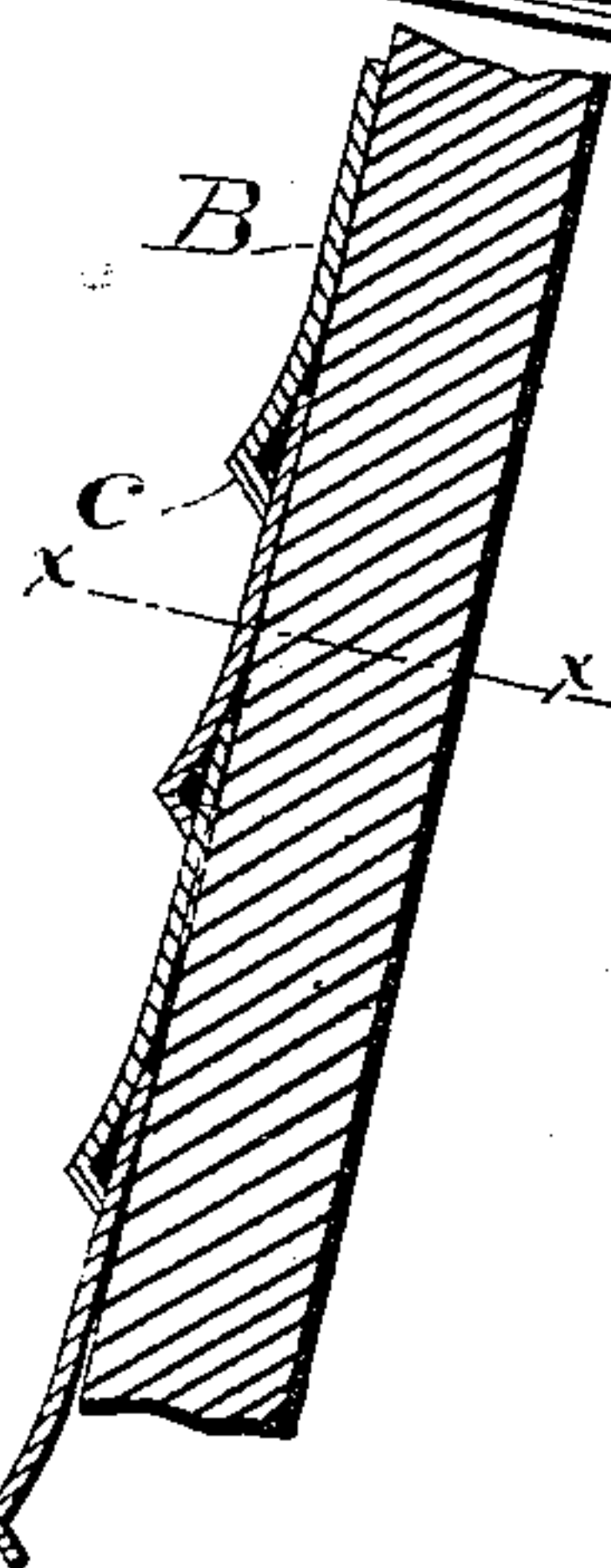


Fig. 2.



WITNESSES:

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METALLIC HIP-ROLL OR ANGLE-BEAD.

SPECIFICATION forming part of Letters Patent No. 370,167, dated September 20, 1887.

Application filed May 6, 1887. Serial No. 237,302. (No model.)

To all whom it may concern:

Be it known that I, JACOB S. THORN, of the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Metallic Hip-Rolls or Angle-Beads, of which the following is a true and exact description, due reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to the hip-rolls or angle-beads used in connection with roof-coverings made up of tiles, metallic plates, or shingles, and has for its object to provide an angle-bead which shall be at the same time ornamental, cheap, easily transported, and in use efficient to prevent leaking.

Reference being now had to the drawings, Figure 1 is a view of a roof having my device applied at an angle. Fig. 2 is a sectional view of a number of my hip-rolls or angle-beads applied as in Fig. 1. Fig. 3 is a modification of my device; Fig. 4, a cross-section at *xx* of Fig. 2, and Fig. 5 a perspective view of one of my improved angle-beads.

A A' are two adjacent sides of a roof covered with shingles or plates, and meeting along the corner of the roof. Along such lines of meeting my improved hip-rolls or angle-beads are to be applied, as shown. I make these angle-beads by bending a sheet of metal so that its central upper part, B, shall have a substantially semi-cylindrical form, the side flanges of the metal plate being bent outward and forming substantially flat plates or wings B' B'. The lower central portion of the plate is struck up or embossed, so that it rises or tapers gradually up and outward from the cylindrical surface of the upper portion, and then abruptly returns to said surface by means of a downwardly-projecting flange, C, of preferably a semi-conical form. The flat wings B' should also have a gradual upward taper corresponding with that of the central portion, and should return to their original plane by

means of downwardly-extending flanges C' C', as shown.

These angle-beads are secured upon the roof, as shown, and present a highly-ornamental appearance; but in addition to this they are peculiarly well adapted to prevent leakage, as the plates, while forming a close joint with each other where the flanges C' C' come in contact with the upper portions, B B' B', of the lower plates, immediately separate, having no lines of close approach, such as would cause water to be drawn upward by the force of capillarity.

These angle-beads fit closely into each other when laid together, and can therefore be easily packed and shipped in small packages. They can be made as shown in Fig. 3, if desired—to wit, with a number of embossed portions, *c*, along a single plate; but I prefer to make them as is shown in Fig. 5, as they are in this form adapted for use in almost any position.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a hip-roll or angle-bead having its upper end made up of a plain curve, B, edged by plain flanges B' B', and its lower end embossed or struck up and terminating in an abrupt downwardly-extending flange, C, all substantially as and for the purpose specified.

2. As a new article of manufacture, a hip-roll or angle-bead having its upper end made up of a plain curve, B, edged by plain flanges B' B', and its lower end embossed or struck up and edged by upwardly-curved flanges, said curve and flanges terminating in abrupt downwardly-extending flanges C' C', all substantially as and for the purpose specified.

JACOB S. THORN.

Witnesses:

CHARLES F. ZIEGLER,
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